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## Patent Abstracts of Japan

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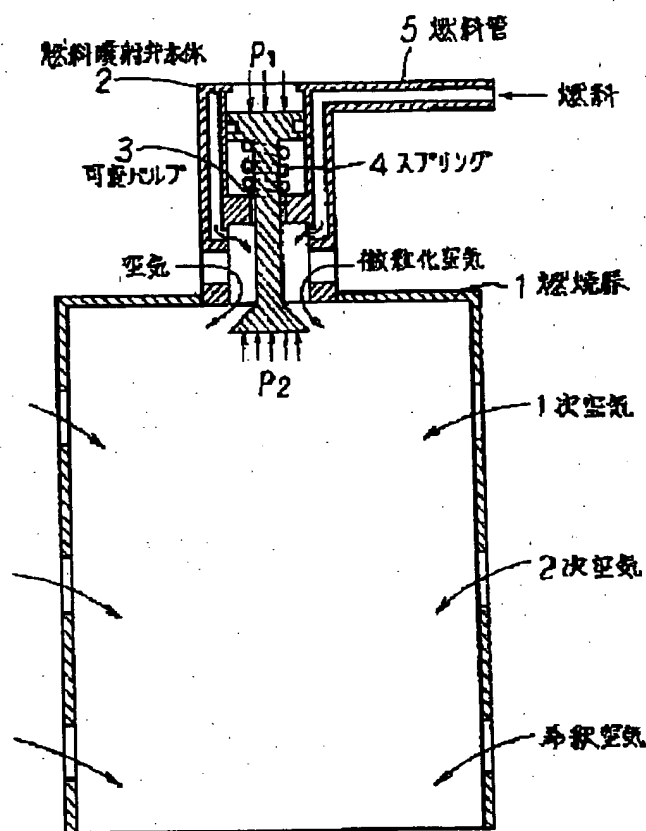
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TITLE : FUEL INJECTION VALVE



ABSTRACT : PURPOSE: To provide a fuel injection valve in which an increase in an air-fuel ratio is suppressed at the time of a low load of an engine and generation of carbon, smoke due to a decrease in the air-fuel ratio can be prevented at the time of a high load of the engine.

CONSTITUTION: A fuel injection valve body 2 is mounted at an end of a gas turbine burner 1. The body 2 is formed with a fuel tube 5 for supplying fuel and a finely pulverized air channel for finely pulverizing the fuel and feeding it into the burner 1. A variable valve 3 is energized to be axially displaceably by a spring 4 in the body 2. An upper part of the valve 3 is formed in a piston structure, and an outer pressure  $P_1$  of the burner 1 is guided to its upper surface. The valve 3 is displaced by a pressure difference between a pressure  $P_2$  in the burner to be applied to its lower surface and the pressure  $P_1$  outside the burner 1 to so alter the channel as to reduce it in the case of a low load of small difference and to increase it in the case of a high load of large difference. Thus, an air-fuel ratio can be held at a preferable value corresponding to the load.

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